

Risk Assessment Candle Making

Activity

Candle making class (small-group workshop) involving melting wax, adding fragrance, pouring into containers/moulds, and finishing/packaging.

Location

Indoor venue with tables, good ventilation, access to handwashing, and clear fire exits.

People at risk

Participants (including pregnant attendees), instructors/hosts, venue staff, visitors.

Key hazards, risks, and controls

Hot wax and heated equipment (burns/scalds) Risks: Skin burns from molten wax, hot jugs/pans, hot plates; splashes during pouring.

Controls:

Use thermostatically controlled wax melters or hot plates; avoid open flames where possible.

Keep wax at the lowest workable temperature; monitor with thermometer.

Demonstrate safe pouring technique; pour away from body; use stable, heat-resistant jugs.

Provide heat-resistant mats/trays; keep handles turned inward.

Maintain a clear "hot zone" with signage; participants remain seated during pouring.

Keep a burn first-aid kit available; brief on immediate cool running water treatment.

Fire risk (wax, wicks, paper packaging) Risks: Ignition from hot plates, electrical faults, nearby combustibles.

Controls:

No smoking/open flames in the work area.

Keep combustibles (paper towels, packaging) away from heat sources.

Do not overheat wax; never leave heating unattended.

Ensure fire exits are unobstructed.

Call emergency services if required.

Fragrance oils, dyes, and additives (skin/eye irritation, sensitisation) Risks: Dermatitis, allergic reactions, eye irritation; stronger risk for asthmatics.

Controls:

Use cosmetic/candle-grade materials.

Ask participants to declare allergies/asthma/pregnancy; offer fragrance-free option.

Clean spills immediately; dispose of contaminated materials safely.

Fumes/ventilation (respiratory irritation) Risks: Headaches/nausea from fragrance vapours; exacerbation of asthma.

Controls:

Ensure good ventilation (open windows/doors or mechanical ventilation).

Limit quantities of fragrance used; keep containers closed when not in use.

Provide breaks and access to fresh air; move sensitive participants away from mixing area.

Spills and slip/trip hazards Risks: Slips from wax/oil spills; trips over bags, cables, or equipment.

Controls:

Keep walkways clear; store bags under tables.

Route and tape down cables; keep equipment central and stable.

Clean spills immediately; warn participants until area is safe.

Electrical safety (hot plates, melters) Risks: Electric shock, burns, fire from faulty equipment.

Controls:

PAT-tested equipment (or venue equivalent checks); visual inspection before use.

Keep liquids away from sockets; use RCD protection where possible.

Do not overload extension leads; use appropriate rated cables.

Switch off/unplug when not in use; staff-only access to plugs.

Participant behaviour and supervision Risks: Horseplay, distraction leading to spills/burns.

Controls:

Safety briefing at start; clear rules (remain seated during hot work, no running).

Under-18s only with guardian consent and close supervision (or exclude).

Emergency procedures

Burns: Cool under running water for at least 20 minutes; remove jewellery; cover with sterile dressing; seek medical help if severe.

Fire: Stop activity, isolate power/heat, raise alarm, evacuate via nearest exit, assemble at venue muster point; call emergency services.

Spill: Cordon area, clean immediately, dispose of waste safely.

Allergic reaction: Stop exposure, move to fresh air, follow participant's care plan (e.g., inhaler/auto-injector if provided), call emergency services if symptoms escalate.

Residual risk rating

With controls in place, residual risk is Low to Medium (primarily due to hot wax and electrical equipment).